



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,362	11/14/2001	Yoshiharu Sasaki	Q67261	7285

7590

01/06/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue N.W.  
Washington, DC 20037

EXAMINER

PHAM, HAI CHI

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/987,362

Applicant(s)

SASAKI, YOSHIHARU

Examiner

Hai C Pham

Art Unit

2861

A-11

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-14 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-14 and 20-28 is/are rejected.
- 7) ☒ Claim(s) 7 and 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson (U.S. 6,204,874 B1) in view of Nzei (U.S. 4,932,644).

With regard to claim 1, Michelson discloses a package containing at least one set of stacked recording media (a large number of donor sheets 9-12 and receivers 8 being pre-packaged in a box and such a box being unloaded at once into the tray 4) (col. 4, lines 9-15) including an image-receiving sheet (receiver sheet 8) having a image-receiving layer (inherent to an image-receiving sheet), which is fed to a recording medium holding member (drum 1) and a plurality of transfer sheets (four donor sheets 9, 10, 11, 12) each having a toner layer (e.g., Fig. 1a), which are successively fed to the recording medium holding member so that the tone layer of each transfer sheet may be brought into contact with the image-receiving layer of the image-receiving sheet, said image-receiving sheet and said transfer sheets being stacked in an order of feeding to the recording medium holding member (col. 3, line 44 to col. 4, line 8).

However, Michelson fails to teach the interleaving sheets being inserted between every adjacent recording media and the interleaving sheet extending outward from at least one side of the set of recording media.

Nzei discloses a sheet feeding mechanism for feeding recording media, which are interleaved with plain paper separator sheets in a tray in a manner that the separator sheets extend beyond the ends of the recording media at the front end of the tray so that the separation of the recording media would be made easier.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the interleaving sheets as taught by Nzei in the device of Michelson. The motivation for doing would have been to facilitate the removal of the different recording media from the package during their feeding to the recording medium holding member.

With regard to claims 2-3, Michelson further teaches the top sheet of the stacked recording media is the receiver element (8) (see Fig. 2), the package containing a plurality of said sets of stacked recording media (10-50 sets) (col. 4, lines 9-15), the feeding process of the recording media being done automatically during printing (Figs. 3a-3f).

With regard to claim 4, although Michelson does not explicitly disclose the image-receiving layer of the receiver sheet and the toner layer of the transfer sheet being disposed in opposite directions, the fact that the receiver sheet and the transfer sheets are grouped in stack in the feeding cassette to be automatically fed onto the drum such that the receiver sheet is disposed in a close contact with the donor sheet

would suggest that the image-receiving layer of the receiver sheet should face the toner layer of the transfer sheet, e.g., to be in opposite directions, in order to facilitate the transfer of toner onto the receiver sheet under the exposure of the laser beam.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to arrange the stacking of the sets of the receiver sheet and transfer sheets in the device of Michelson such that the image-receiving layer of the receiver sheet and the toner layer of the transfer sheet are disposed in opposite directions for the purpose of facilitating the transfer of toner onto the receiver sheet under the exposure of the laser beam.

3. Claims 8-14, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson in view of Nzei and Egashira et al. (U.S. 5,135,905).

Michelson, as modified by Nzei, discloses all the basic limitations of the claimed invention including a feed cassette (Fig. 2) used in an image recording apparatus, the feed cassette comprising a cassette body (tray 4) into which the above preset stacked recording-media is unloaded (referring to claim 11), but except for the interleaving sheet being disposed between the packaging material and the recording media, the interleaving sheet being made of the same material and having the same condition/properties as the substrate of the recording media, and the cassette body being made of paperboard, and packaged in an external packaging sheet.

Egashira et al. discloses a stack of image-receiving sheets being provided in a package with an interleaving sheet (protective sheet) being inserted between each of

the sheets, where the top and bottom of the stack includes the interleaving sheet next to the packaging material. Egashira et al. also teaches the both the substrate of the recording media and the interleaving sheet being made of the same material, e.g., synthetic paper or plastic film (col. 9, lines 4-19, col. 11, lines 31-39, and col. 12, lines 35-51), the package containing the stack of recording material being made of paperboard (5) or packaged in an external packaging sheet and further packaged in a paperboard box (9, Fig. 8).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Michelson, as modified by Nzei, with the aforementioned teaching of Egashira et al. The motivation for doing so would have been to prevent the recording media from being stained.

4. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson in view of Nzei and Egashira et al., as applied to claim 11 above, and further in view of Komori et al. (U.S. 3,919,972).

Michelson, as modified by Nzei and Egashira et al., discloses all the basic limitations of the claimed invention except for the cushioning material, and the dust-free sponge cushioning material.

Komori et al. discloses an automatic cut sheet-feeding unit, which includes a cushioning material (17, Figs. 25-26) for pressing the paper from the lateral side to the feed direction, the cushioning material being made of sponging plastic backed by a spring (18) for restraining the lateral movement of the paper.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the cushioning device as taught by Komori et al. in the modified device of Michelson for the purpose of restraining the lateral movement of the recording medium.

5. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson in view of Nzei and Egashira et al., as applied to claim 11 above, and further in view of Hirano et al. (U.S. 6,246,466 B1).

Taylor, Jr. et al. in view of Nzei and Egashira et al. discloses all the basic limitations of the claimed invention except for the cassette body including a detachable lid.

Hirano et al. discloses a sheet pack container having recording media to be supplied to a recording apparatus, the sheet pack being made of paperboard, and having an openable and closable lid portion (402a) attached to the container.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the detachable lid as taught by Hirano et al. in the modified device of Michelson. The motivation for doing so would have been to self-contained and dust-proof cassette for storing the sensitive recording media.

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nzei, Egashira et al. and Baek et al. (U.S. 5, 754,218).

Michelson, in view of Nzei and Egashira et al., discloses all the basic limitations of the claimed invention (see related claim rejection in paragraphs 2 and 3 above) except for the recording head moving in the direction perpendicular to the moving direction of the drum.

Regardless, the structure of the printing device of Michelson in Fig. 2 would suggest such movement of the print head (3) along the axial direction of the drum (1) in order to expose the recording media width wide, as evidenced by Baek et al., which shows a more detailed structural printing device (Fig. 1), in which the print head (14) is moved perpendicular to the movement of the drum (12) while exposing the set of recording media consisting of a receiver member (36) and donor member (38) disposed in a close contact on the surface of the drum.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Michelson with the aforementioned teaching of Baek et al. for the purpose of performing imagewise exposure of the total imaging surface of the recording media.

#### ***Allowable Subject Matter***

7. Claims 7, 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-4, 8-14 and 20-28 have been considered but are moot in view of the new grounds of rejection presented in this Office action.

9. Applicant's arguments filed 10/27/03 have been fully considered but they are not persuasive with regard to the teaching of Nzei. As it is understood from the specification of the current invention on page 21, lines 14-17, the preset stacked recording media (23) are unloaded onto the feed cassette of the recording apparatus all at once when they are taken out of the package. Nzei teaches that "a stack (14) of interleaved transparency sheets and plain paper separator sheets are mounted in the tray 12" (col. 4, lines 40-42) indicating that the whole set of interleaved recording media and separator sheets being unloaded into the tray all at once. Therefore, contrary to Applicant's arguments, Nzei does suggest the interleaved recording media and separator sheets come as a preset stack or package.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (703) 308-1281. The examiner can normally be reached on T-F (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin R. Fuller can be reached on (703) 308-0079. The fax phone

Art Unit: 2861

numbers for the organization where this application or proceeding is assigned are (703) 308-7722, (703) 308-7724, (703) 308-7382, (703) 305-3431, (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in cursive script, appearing to read "Hai Pham".

**HAI PHAM**  
**PRIMARY EXAMINER**  
December 31, 2003